

List of Publications

Pekka T. Verronen

6th February 2023

Publication list also at <https://www.webofscience.com/wos/author/record/G-6658-2014>
(most recent publications might not be registered yet)

1. Sarris T., Palmroth M., Aikio A., Buchert S.C., Clemmons J., Clilverd M., Dandouras I., Doornbos E., Goodwin L.V., Grandin M., Heelis R., Ivchenko N., Moretto-Jørgensen T., Kervalishvili G., Knudsen D., Liu H.L., Lu G., Malaspina D.M., Marghitu O., Maute A., Miloch W.J., Olsen N., Pfaff R., Stolle C., Talaat E., Thayer J., Tourgaidis S., **Verronen, P.T.**, and Yamauchi M. (2023), Plasma-neutral interactions in the lower thermosphere-ionosphere: The need for in situ measurements to address focused questions, *Front. Astron. Space Sci.*, *9*:1063190, <https://doi.org/10.3389/fspas.2022.1063190>, 2023.
2. Nilsen, K., A. Kero, **P.T. Verronen**, M.E. Szélag, First analysis of direct satellite-borne observations of ozone impact by the November 2001 solar proton event, *J. Geophys. Res. Atmos.*, *127*, e2022JD036904, <https://doi.org/10.1029/2022JD036904>, 2022.
3. Szélag, M.E., D.R. Marsh, **P.T. Verronen**, A. Seppälä, and N. Kalakoski, Ozone impact from solar energetic particles cools the polar stratosphere, *Nature Commun.*, *13*, 6883, <https://doi.org/10.1038/s41467-022-34666-y>, 2022.
4. Baumann, C., Kero, A., Raizada, S. Rapp, M., Sulzer, M.P., **Verronen, P.T.**, and Vierinen, J., Arecibo measurements of D-region electron densities during sunset and sunrise: implications for atmospheric composition, *Ann. Geophys.*, *40*, 519–530, <https://doi.org/10.5194/angeo-40-519-2022>, 2022.
5. Bernhardt, P.A., M. Hua, J. Bortnik, Q. Ma, **P.T. Verronen**, M.P. McCarthy, D.L. Hampton, M. Golkowski, M.B. Cohen, D.K. Richardson, A.D. Howarth, H.G. James, and N.P. Meredith, Active Precipitation of Radiation Belt Electrons using Rocket Exhaust Driven Amplification (REDA) of Man-Made Whistlers, *J. Geophys. Res. Space*, *127*, e2022JA030358, <https://doi.org/10.1029/2022JA030358>, 2022.
6. Newnham, D.A., M.A. Clilverd, W.D.J. Clark, **P.T. Verronen**, and A.E.E. Rogers, Ground-based Ku-band microwave observations of ozone in the polar middle atmosphere, *Atmos. Meas. Tech.*, *15*, 2361–2376, <https://doi.org/10.5194/amt-15-2361-2022>, 2022
7. Sinnhuber, M., H. Nesse Tyssøy, T. Asikainen, S. Bender, B. Funke, K. Hendrickx, J. Pettit, T. Reddmann, E. Rozanov, H. Schmidt, C. Smith-Johnsen, T. Sukhodolov, M.E. Szélag, M. van de Kamp, **P.T. Verronen**, J.M. Wissing, O.S. Yakovchuk, Heppa III intercomparison experiment on medium-energy electrons, part II: Model-measurement intercomparison of nitric oxide (NO) during a geomagnetic storm in April 2010, *J. Geophys. Res. Space*, *127*, e2021JA029466, <https://doi.org/10.1029/2021JA029466>, 2021.
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- a geomagnetic active period in April 2010, *J. Geophys. Res. Space*, *127*, e2021JA029128, <https://doi.org/10.1029/2021JA029128>, 2021.
9. **Verronen, P.T.**, A. Kero, N. Partamies, M.E. Szélag, S. Oyama, Y. Miyoshi, and E. Turunen, Simulated seasonal impact on middle atmospheric ozone from high-energy electron precipitation related to pulsating aurorae, *Ann. Geophys.*, *39*, 883–897, <https://doi.org/10.5194/angeo-39-883-2021>, 2021.
 10. Nilsen, K., A. Kero, **P.T. Verronen**, M.E. Szélag, N. Kalakoski, J. Jia, Sensitivity of middle atmospheric ozone to solar proton events: A comparison between a climate model and satellites, *J. Geophys. Res. Atmos.*, *126*, e2021JD034549, <https://doi.org/10.1029/2021JD034549>, 2021.
 11. S. Guttu, Y. Orsolini, F. Stordal, O.H. Otterå, N.-E. Omrani, N. Tartaglione, **P.T. Verronen**, C.J. Rodger, M.A. Clilverd, Impacts of UV Irradiance and Medium-Energy Electron Precipitation on the North Atlantic Oscillation during the 11-year solar cycle, *Atmosphere*, *12*, 1029, <https://doi.org/10.3390/atmos12081029>, 2021.
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 14. Häkkinen, T., **P.T. Verronen**, L. Millán, M.E. Szélag, N. Kalakoski, and A. Kero, Odd hydrogen response thresholds for indication of solar proton and electron impact in the mesosphere and stratosphere, *Ann. Geophys.*, *38*, 1299–1312, <https://doi.org/10.5194/angeo-38-1299-2020>, 2020.
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 17. **Verronen, P.T.**, D.R. Marsh, M.E. Szélag, and N. Kalakoski, Magnetic local time dependency of radiation belt electron precipitation: impact on ozone in the polar middle atmosphere, *Ann. Geophys.*, *38*, 833–844, <https://doi.org/10.5194/angeo-38-833-2020>, 2020.

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